MONTHY COMMUNICABLE DISEASE REPORT

April 2004

CONTENTS

Section I: Top Ten Reportable Diseases in Missouri as of May 4, 2004

The following data were reported through the MISSOURI HEALTH SURVEILLANCE INFORMATION SYSTEM (MOHSIS) and the TUBERCULOSIS INFORMATION MANAGEMENT SYSTEM (TIMS). For diseases reported through MOHSIS, counts include confirmed and probable cases only, except for acute Hepatitis C that includes only confirmed cases. For tuberculosis reported through TIMS, counts include only verified cases of TB disease.

As of May 4, 2004 (Report Week #18), influenza and chronic Hepatitis C were the two most common reportable diseases – **excluding sexually transmitted diseases** – in Missouri (Table 1). Giardiasis, salmonellosis, campylobacteriosis, and acute Hepatitis C were the next most common diseases; with over one hundred reported cases each. Due to changes in reporting requirements and disease definitions, 5-year median values may be either approximations or unavailable (see below).

Of the ten diseases – **excluding sexually transmitted diseases** – with the highest number of reported cases through May 4, 2004 (Report Week #18); six exceeded the 5-year median value **(Table 1)**. Of these six; the year-to-date number of cases of influenza, acute Hepatitis C, acute and chronic Hepatitis B, and pertussis were significantly higher than the 5-year median. A portion of this increase may reflect improvements in reporting. While the year-to-date number of cases of four diseases was below the 5-year median, only chronic Hepatitis C was significantly lower **(Table 1)**.

****Data analysis in this section does not include sexually transmitted diseases. Additionally, all 2004 communicable disease data presented in this section are provisional.***

Next Page

Section I: Top Ten Reportable Diseases in Missouri - Continued

Table 1. Top Ten (by Count) Reportable Diseases and/or Conditions in Missouri **– excluding sexually transmitted diseases –** as of May 4, 2004 (Report Week #18).

Top Ten Disease/Conditions	Year-to-Date Count (2004)	5-Year Median Count (1999-2003)	2004 as a Percent of the 5-Year Median	2004 Crude Rate per 100,000[a]
Influenza	4,285	2,417	177	76.58
Hepatitis C, Chronic Infection[b]	1038	1852	56	18.55
Giardiasis	171	183	93	3.06
Hepatitis C, Acute Infection	128	17	753	2.29
Salmonellosis	161	163	99	2.88
Campylobacteriosis	140	136	103	2.50
Hepatitis B, Acute Infection	98	52	188	1.75
Pertussis	77	24	321	1.38
Hepatitis B, Chronic Infection[c]	45	28	161	0.80
Tuberculosis	37	39	95	0.66

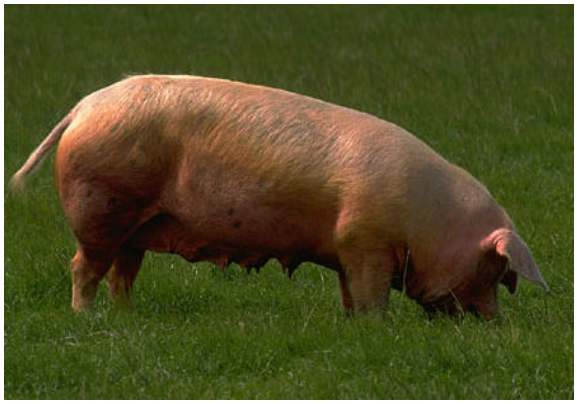
a. Year to date crude rates calculated in using 2000 U.S. Census data.
b. Prior to mid-year of 2002, Hepatitis C, chronic infection was not discretely reportable. As a result, changes in disease status coding limit the interpretive utility of the 5-year median values for chronic Hepatitis C.
c. Hepatitis B, Chronic Infection did not become reportable until 2003. As a result, year-to-date data for 2003 was substituted for the 5-year median value.

Section II: In the Spotlight - Salmonellosis

The Epidemiology of Salmonellosis.[1,2] Most individuals with salmonellosis, an infection with *Salmonella* bacteria, develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection. *Salmonella* infections usually resolve in 5-7 days and often do not require treatment unless the individual becomes severely dehydrated or the infection spreads from the intestines. Antibiotics are not usually necessary unless the infection spreads from the intestines. Unfortunately, some *Salmonella* bacteria have become resistant to antibiotics. In some cases diarrhea may be so severe hospitalization is required.

Every year, approximately 40,000 cases of salmonellosis are reported in the United States. Because many milder cases are not diagnosed or reported, the actual number of infections may be thirty or more times greater. Salmonellosis is more common in the summer than winter. Children are the most likely to get salmonellosis. Young children, the elderly, and the immuno-compromised are the most likely to have severe infections. It is estimated that approximately 600 persons die each year with acute salmonellosis.

Persons with salmonellosis usually recover completely, although it may be several months before their bowel habits are entirely normal. A small number of persons will go on to develop pains in their joints, irritation of the eyes, and painful urination. This is called Reiter's syndrome. It can last for months or years, and can lead to chronic arthritis.



Salmonella bacteria live in the intestinal tracts of humans and other animals. *Salmonella* are usually transmitted to humans by eating foods contaminated with animal feces. Contaminated foods are often of animal origin, such as beef, poultry, milk, or eggs, but all foods, including vegetables may become contaminated. **The unwashed hands of an infected person may also contaminate food.**

1. Department of Health and Human Services, Centers for Disease Control and Prevention > Division of Bacterial and Mycotic Diseases > Disease Information > Salmonellosis. http://www.cdc.gov/ncidod/dbmd/diseaseinfo/salmonellosis_g.htm
2. Communicable Disease Investigation Reference Manual – Revised 7/03. Division of Environmental Health and Communicable Disease Prevention, Missouri Department of Health and Senior Services. Jefferson City, Mo. http://www.dhss.mo.gov/CDManual/CDManual.htm

Section II: In the Spotlight - Salmonellosis – Continued

To prevent salmonellosis:

· Cook poultry, ground beef, and eggs thoroughly before eating.

· Do not eat or drink foods containing raw eggs, or raw unpasteurized milk.

· Wash hands, kitchen work surfaces, and utensils with soap and water immediately after they have been in contact with raw meat or poultry.

· Wash hands with soap and water after handling reptiles or birds, or after contact with pet feces.

· Avoid direct or even indirect contact between reptiles and infants or immuno-compromised persons.

· Don't work with raw poultry or meat, and an infant at the same time.

· Mother's milk is the safest food for young infants. Breast-feeding prevents salmonellosis and other health problems.

Salmonellosis in Missouri – 2003. In 2003, there were 882 reported cases of confirmed and probable salmonellosis.[3] Considering sex; 45.1% of the cases were male, 54.2% female, and the remainder did not have a gender designation. Considering race; 38.1% identified themselves as white, 7.9% black, 0.6% Asian, 0.1% American Indian, 0.1% Pacific Islander, and the remainder did not have a race designation. Finally, 1% indicated a Hispanic ethnicity.

3. 2003 Annual Report: Bioterrorism, Communicable Disease, and Environmental Surveillance. Office of Surveillance, Division of Environmental Health and Communicable Disease Prevention, Missouri Department of Health and Senior Services. Jefferson City, Mo. http://www.dhss.mo.gov/CommunicableDisease/03Annual.pdf

Section II: In the Spotlight: Salmonellosis – Continued

In 2003, the number of reported cases of salmonellosis was highest from June through September **(Table 2)**. Over one-fifth of cases occurred in children aged 0-4 years, while approximately one-tenth occurred in each age group between 5 and 54 years. Over two-fifths of cases occurred in the Eastern Health Regions, while approximately one-quarter occurred in the Northwest Health Region.

Table 2. 2003 Distribution of Reported Cases of Confirmed and Probable Salmonellosis; by Month, Age Group, and Health Region.

Month	*Percent of Cases*	Age Group	*Percent of Cases*	Health Region	*Percent of Cases*
January	*4.1%*	**0-4**	*21.8%*	**Northwest**	*24.6%*
February	*3.6%*	**5-14**	*13.6%*	**Eastern**	*43.4%*
March	*4.1%*	**15-24**	*10.4%*	**Central**	*8.5%*
April	*4.7%*	**25-34**	*12.0%*	**Southeast**	*11.1%*
May	*8.2%*	**35-44**	*13.3%*	**Southwest**	*11.0%*
June	*15.8%*	**45-54**	*10.1%*	**Out-of-State**	*1.4%*
July	*12.4%*	**55-64**	*8.7%*	**Unknown**	--
August	*16.4%*	**65-74**	*4.6%*		
September	*12.5%*	**75-84**	*2.9%*		
October	*8.6%*	**85+**	*1.2%*		
November	*5.2%*	**Unknown**	*1.2%*		
December	*4.4%*				

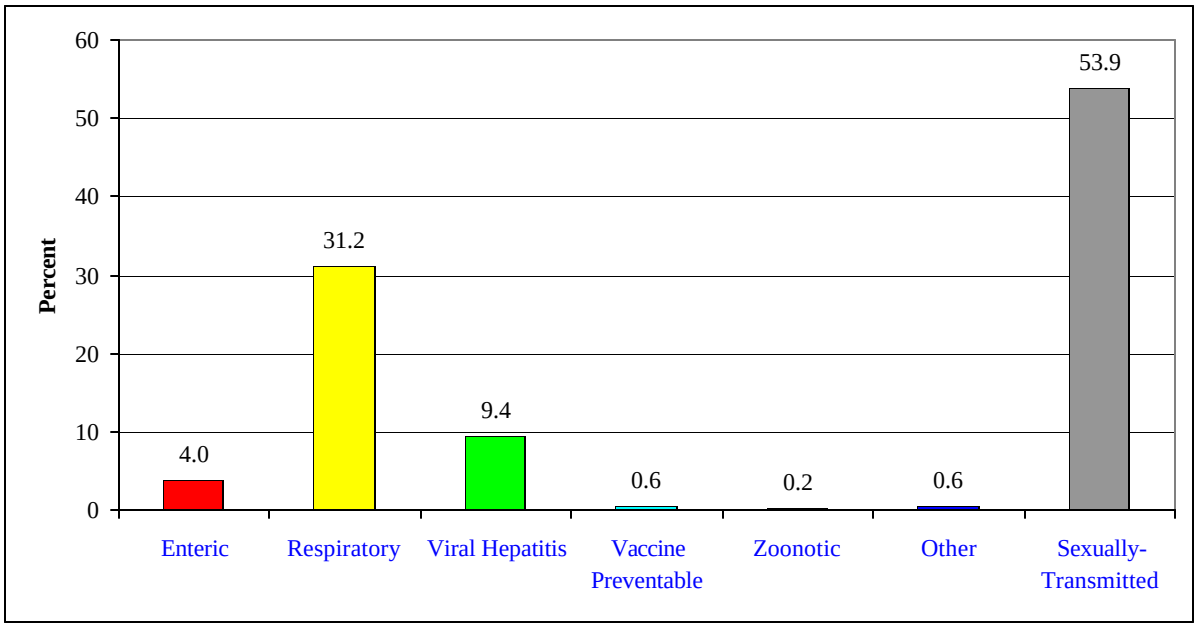
-- Indicates no reported confirmed or probable case(s) in this socio-demographic category.

Section III: Distribution of Reported Cases, by Disease Category

Excluding the 'Animal Bite' classification; sexually-transmitted diseases **– excluding HIV –** comprised the largest percentage of cases (53.9%) reported as of May 4, 2004 (Report Week #18) (Figure 1).* Respiratory diseases comprised the next largest percentage of cases (31.2%), followed by viral hepatitis (9.4%) and enteric diseases (4%). The remaining disease categories (i.e., vaccine preventable, zoonotic, and other disease) comprised less than 1% each of the total number of reported cases.

**Data for sexually transmitted disease (STD) are through March 31, 2004. Additionally, all 2004 communicable disease data presented in this section are provisional.*

Figure 1. Percentage of Reportable Diseases and/or Conditions in Missouri **– excluding HIV –** as of May 4, 2004 (Report Week #18) – by Disease Category.*



Section IV: Links to other Communicable Disease Surveillance Unit Reports*

Other Communicable Disease Surveillance Unit Reports*

Report Title	Report Interval	Report Web Location
Summary of Notifiable Diseases in Missouri	annual	http://www.dhss.mo.gov/CommunicableDisease/Reports.html
previous Communicable Disease Newsletters	monthly	http://www.dhss.mo.gov/CommunicableDisease/Reports.html
Rabies Surveillance	monthly	http://www.dhss.mo.gov/Rabies/index.html
HIV/STD Statistical Report	various	http://www.dhss.mo.gov/HIV_STD_AIDS/Data.html
Influenza Surveillance	weekly	http://www.dhss.mo.gov/Influenza/Reports.html

* To obtain additional information please contact the Office of Surveillance at (573) 751-9071.

Other Communicable Disease Resources

Resource Title	Resources Web Location
List of Diseases and Conditions Reportable in Missouri	http://www.dhss.mo.gov/CommunicableDisease/reportablediseaselist2.pdf
MDHSS Disease Case Report (CD-1)	http://www.dhss.mo.gov/CDManual/CDappends.pdf
Communicable Disease Investigation Reference Manual	http://www.dhss.mo.gov/CDManual/CDManual.htm
Missouri Information for Community Assessment	http://www.dhss.mo.gov/MICA/nojava.html

Section III: Distribution of Reported Cases, by Disease Category:

Enteric

NUMBER OF REPORTED CASES AS OF MAY 4, 2004	
ENTERIC DISEASES	
Acute Gastrointestinal Illness	4
Botulism, Infant	1
Campylobacteriosis	140
Cryptosporidiosis	15
Cyclosporiasis	2
Escherichia Coli O157 H7	5
Escherichia Coli Shiga Toxin	4
Escherichia Coli Shiga Toxin (not SG)	2
Giardiasis	171
Hemolytic Uremic Sydrome	3
Salmonella	161
Shigellosis	31
Typhoid	1
Yersiniosis	8
TOTAL	**548**

Section III: Distribution of Reported Cases, by Disease Category:

Respiratory

NUMBER OF REPORTED CASES AS OF MAY 4, 2004	
RESPIRATORY DISEASES	
Adult Respiratory Distress Syndrome	1
Coccidioidomycosis	3
Influenza	4285
Legionellosis	4
Tuberculosis	37
TOTAL	**4330**

Section III: Distribution of Reported Cases, by Disease Category:

Viral Hepatitis

NUMBER OF REPORTED CASES AS OF MAY 4, 2004	
VIRAL HEPATITIS	
Hepatitis A	17
Acute Hepatitis B	98
Chronic Hepatitis B	45
Perinatal Hepatitis B	1
Acute Hepatitis C	163
Chronic Hepatitis C	984
Hepatitis , other or unspecified	1
TOTAL	**1309**

Section III: Distribution of Reported Cases, by Disease Category:

Vaccine Preventable

NUMBER OF REPORTED CASES AS OF MAY 4, 2004	
VACCINE PREVENTABLE DISEASES	
Mumps	2
Pertussis	77
Rubella	1
TOTAL	**80**

Section III: Distribution of Reported Cases, by Disease Category:

Zoonotic

NUMBER OF REPORTED CASES AS OF MAY 4, 2004	
ZOONOTIC DISEASES	
Ehrlichiosis HME	3
Lyme	17
Malaria	3
Q Fever	2
Rabies, animal	3
Rocky Mountain Spotted Fever	4
Tularemia	1
West Nile Virus Encephalitis/Meningitis	1
TOTAL	**34**

Section III: Distribution of Reported Cases, by Disease Category:

Other

NUMBER OF REPORTED CASES AS OF MAY 4, 2004	
OTHER DISEASES	
Aseptic and Bacterial Meningitis, other	12
Meningitis, other (fungal)	3
Meningicoccal Meningitis	8
Haemophilus Influenzae	11
Streptococcal Disease, invasive Group A	36
Streptococcal Pneumonia	14
other	2
TOTAL	**86**

Section III: Distribution of Reported Cases, by Disease Category:

Sexually-Transmitted

NUMBER OF REPORTED CASES AS OF MARCH 31, 2004	
SEXUALLY-TRANSMITTED DISEASES	
Chlamydia	5277
Gonorrhea	2151
Syphilis - Early	18
Syphilis - Latent, Late/Duration Unknown	32
Syphilis - Congenital	1
TOTAL	**7479**